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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,404	09/28/2001	Lalitha Agnihoiri	US010447	4387

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BRIARCLIFF MANOR, NY 10510

EXAMINER

PIERRE, MYRIAM

ART UNIT

PAPER NUMBER

2626

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/966,404

Applicant(s)

AGNIHOTRI ET AL.

Examiner

Myriam Pierre

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This communication is in response to Remarks, filed 10/03/06.
2. Claims 1-8, 10-11, and 13-26 are amended..

Response to Arguments

Applicant's arguments filed 08/22/06 have been fully considered but they are not persuasive.

Claims 1-2, 8-12, 16-18, and 26

Applicant argues that Chang (5,543,851) does not disclose or suggest formatting the video component and related translated text data for synchronized output, this argument is not persuasive. Chang does teach formatting video as this is inherent in the start up of the program, col. 6 lines 20-31. Therefore, Chang does teach or suggest formatting the video component and related translated text data for synchronized output.

Claims 3-7 and 19-22

Applicant argues that Chang fails prima facie case of obviousness, this argument is not persuasive. Carbonell et al. do teach sequentially analyzing portions of text data includes the step of determining where a term present in said portion of text data under analysis is repeated and if the term is determined to be repeated, replacing the term with a different term of similar meaning in all occurrences after a first occurrence of the term (col. 10 lines 32-54) and the motivation to combine the references is in order that signals have to be analyzed since meaning

lies under the surface of textual signals, col. 10 lines 35-40. Carbonell's colloquialism portion is related via allowing vocabulary items to reflect clear ideas and be appropriate for the target readership, col. 13 lines 55-56. Therefore, Chang and Carbonell are correct motivations.

Claims 13-15 and 23-25

Applicant argues that Parry fails to disclose or suggest adjusting a complexity of translation to a target language. Moreover, the cited portions of Parry each only that follow up questions have increasing complexity. This argument is not persuasive. Parry teach learning adjusting learning aids which is in fact related to the complexity of the questions in learning a language, col. 20 lines 30-55 and col. 2 lines 49-61) and one would be motivated to do this because this would maximize the student's learning efficiency using student specific activity sequencing, col. 20 lines 52-57. Therefore, Parry do teach adjusting a complexity of translation to a target language.

Claim Rejections - 35 USC § 102

3. Claims 1-2, 8-12, 16-18 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang (5,543,851).

As to claim 1, Chang teach

A method for processing an audio/video signal and an auxiliary information signal comprising text data that is temporally related to the audio/video signal (col. 2 line 64), said method comprising the steps of:

sequentially analyzing portions of said text data in an original language in which said text data is received (col. 6 lines 24-31);

sequentially translating said portions of text data in accordance with a variable level of complexity of translation to a target language according with a variable level of complexity of translation to a target language (col. 3 lines 11-12 and col. 4 lines 27-39; the identifier is a flag that represents the degree of difficulty of a word, phrase, or information, done by the caption manager which also translates the displayed text); and

displaying said portions of translated text data while simultaneously playing the audio/video signal that is temporally related to each of the portions (col. 3 lines 10-12; col. 2 lines 63-64; and Fig. 1 elements 22 and 24)

As to claim 2, which depends on claim 1, Chang teach

further comprising the step of receiving said audio/video signal and said auxiliary information signal (col. 3 lines 10-12; col. 2 lines 63-64; and Fig. 1 elements 22 and 24); separating said video signal into an audio component and a video component (col. 3 lines 5-10); and filtering said text data from said auxiliary information signal (col. 3 lines 10-12).

As to claim 8, which depends on claim 2; Chang teach

wherein said text data is speech-to-text transcriptions in said video component (closed caption text, col. 2 line 64).

As to claim 9, which depends on claim 1, Chang teach

wherein said synchronized audio/video signal is a radio/television signal (Figs.1 elements 22-24).

As to claim 10, which depends on claim 1, Chang teach wherein said audio/video signal and said auxiliary information signal are received as an integrated signal and said method further comprises the step of separating the integrated signal into an audio component, a video component and an auxiliary information component (col. 2 lines 59-64).

As to claim 11, which depends on claim 10, Chang teach wherein said text data is separated from other auxiliary data (col. 5 lines 39-45; col. 3 lines 11-13 and col. 4 lines 27-39; the second operational mode has the auxiliary data used for selecting text for processing in response to user commands, auxiliary data is the definition of a word).

As to claim 12, which depends on claim 10, Chang teach wherein said audio component, said video component and said auxiliary information component are synchronized (col. 3 lines 19-20 and col. 5 lines 39-45; synchronization generator provides signal to the closed caption decoder for timing the processing of the encoded radio signal, the encoded radio signal are video/audio signal and caption data, the caption data is the text and the auxiliary information is the definition of the text).

As to claim 16, Chang teach

An apparatus for processing an audio/video signal and an auxiliary information component comprising text data that is temporally related to the audio/video signal (col. 2 line 64), said apparatus comprising:

one filter for separating said signals into an audio component, a video component and related text data (col. 2 lines 50-53 and lines 59-63);

a microprocessor for analyzing portions of said text data in an original language in which said text data is received, the microprocessor having software for translating said portions of text data in accordance with variable level of complexity of translation to a target language (col. 3 lines 11-12 and col. 4 lines 27-39) and formatting the video component and related translated text data for synchronized output (col. 3 lines 19-20 and lines 42-45).

As to claim 17, which depends on claim 16, Chang teach

further comprising: a receiver for receiving said signals; and a filter for extracting text data from said auxiliary information component (col. 2 lines 50-53 and lines 59-64; the tuner acts as a receiver and also filters audio/video and caption data, which has the auxiliary data, to a receiver).

As to claim 18, which depends on claim 16, Chang teach

further comprising a memory for storing a plurality of language databases, wherein said language databases include a metaphor interpreter (Fig. 2 element 44 and col. 6 lines 24-34; identifier values are used as metaphor interpreter such as "entertainment" or "infrastructure").

As to claim 26, Chang teach

A receiver for processing a synchronized audio/video signal containing text data that is temporally related to said audio/video signal, said receiver comprising:

input means for receiving said signal (col. 3 line 43-44);

a microprocessor (col. 3 line 43-44) for analyzing said text data in an original language in which said signal was received (col. 2 line 64; the sliced data text is in the original or first language); and

translating means for translating said text data in accordance with a variable level of complexity of translation to a target language (col. 3 lines 11-12 and col. 4 lines 27-39; the identifier is a flag that represents the degree of difficulty of a word, phrase, or information, done by the caption manager which also translates the displayed text).

Claim Rejections - 35 USC § 103

4. Claims 3-7 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (5,543,851) in view of Carbonell et al. (5,677,835).

As to claim 3, which depends on claim 1, Chang does not explicitly teach repeating term with different term of similar meaning.

However, Carbonell et al. do teach

wherein the step of sequentially analyzing said portions of text data includes the step of determining where a term present in said portion of text data under analysis is repeated and if the term is determined to be repeated, replacing the term with a different term of similar meaning in all occurrences after a first occurrence of the term (col. 10 lines 32-54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement repeating term with different term of similar meaning of Carbonell et al. into the method of Chang, because Carbonell et al. teach that signals have to be analyzed since meaning lies under the surface of textual signals, col. 10 lines 35-40.

As to claim 4, which depends on claim 1, Chang do teach determining whether one of a metaphor is present in said portion of text data (Fig. 2 element 44 and col. 6 lines 24-34; Fig. 7a element 706; identifier values are used as metaphor interpreter such as “entertainment” or “infrastructure”)

Chang does not explicitly teach determining whether one of a colloquialism is present in said portion of text data.

However, Carbonell et al. do teach wherein the step of sequentially analyzing said portions of text data includes the step of determining whether one of a colloquialism is present in said portion of text data under consideration, and replacing said ambiguity with standard terms representing the intended meaning (col. 10 lines 32-54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement analyzing text data of Carbonell et al. into the method of Chang, because Carbonell et al. teach that this will allow vocabulary items to reflect clear ideas and be appropriate for the target readership, col. 13 lines 55-56.

As to claim 5, which depends on claim 1, Chang do teach determining whether one of a metaphor is present in said portion of text data (Fig. 2 element 44 and col. 6 lines 24-34; Fig. 7a element 706; identifier values are used as metaphor interpreter such as “entertainment” or “infrastructure”)

Chang does not explicitly teach determining whether one of a colloquialism is present in said portion of text data.

However, Carbonell et al. do teach further comprising the step of sequentially analyzing said portions of translated text data and determining whether one of a colloquialism and metaphor is present in said portions of translated text data, and replacing said ambiguity with standard terms representing the intended meaning (col. 10 lines 31-67 and col. 11 lines 31-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement determining whether one of colloquialism and metaphor is present in translated text of Carbonell et al. into the method of Chang, because Carbonell et al. teach that colloquial terms can inhibit communication and that while not necessarily mandatory for MT-oriented processing, are nevertheless important guidelines for document production in general, col. 13 lines 55-57.

As to claim 6, which depends on claim 1, Chang does not explicitly teach determining parts of speech of words.

However, Carbonell et al. do teach

wherein the step of sequentially analyzing said portions of text data includes the step of determining parts of speech of words in said portion of text data under consideration and

displaying the part of speech with the displayed translated text data (col. 13 lines 1-15 and col. 22 lines 1-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement determining parts of speech of words of Carbonell et al. into the method of Chang, because Carbonell et al. teach that this will allow for clarification of ambiguity, col. 22 lines 8-11.

As to claim 7, which depends on claim 1, Chang does not explicitly teach cultural and historical knowledge database.

However, Carbonell et al. do teach further comprising the step of analyzing said portions of text data and said portions of translated text data by consulting a cultural and historical knowledge database and displaying the analysis results (col. 15 lines 45-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement cultural and historical knowledge database of Carbonell et al. into the method of Chang, because Carbonell et al. teach that a knowledge-based machine translation must be supported by world knowledge and by linguistic semantic knowledge about meanings of lexical units and their combinations, col. 15 lines 45-50.

As to claim 19, which depends on claim 16, Chang teach language database (col. 4 lines 9-13)

Chang does not explicitly teach a thesaurus.

However, Carbonell et al. do teach wherein said language databases include a thesaurus (col. 18 lines 35-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement a thesaurus of Carbonell et al. to the apparatus of Chang, because Carbonell et al. teach that this will allow related words that might aid authors to reword sentencing, col. 18 lines 55-59.

As to claim 20, which depends on claim 18, Chang does not explicitly teach storing a plurality of cultural/historical knowledge databases.

However, Carbonell et al. do teach wherein said memory further stores a plurality of cultural/historical knowledge databases cross-referenced to said language database (col. 15 lines 45-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement storing cultural/historical knowledge databases of Carbonell et al. to the apparatus of Chang, because Carbonell et al. teach that a knowledge-based machine translation must be supported by world knowledge and by linguistic semantic knowledge about meanings of lexical units and their combinations, col. 15 lines 45-50.

As to claim 21, which depends on claim 16, Chang does not explicitly teach parser software for describing said portions of text data by stating its part of speech.

However, Carbonell et al. do teach

wherein the microprocessor further comprises parser software for describing said portions of text data by stating its part of speech, form and syntactical relationships in a sentence (col. 27 lines 35-57 and col. 28 lines 5-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement parser software for describing said portions of text data by stating its part of speech of Carbonell et al. to the apparatus of Chang, because Carbonell et al. teach that, will allow source and target languages to be selected while requiring minimal modifications to the computational structure, col. 27 lines 35-57.

As to claim 22, which depends on claim 16, Chang do teach determining whether one of a metaphor is present in said portion of text data (Fig. 2 element 44 and col. 6 lines 24-34; Fig. 7a element 706; identifier values are used as metaphor interpreter such as “entertainment” or “infrastructure”)

Chang does not explicitly teach determining whether one of a colloquialism is present in said portion of text data.

However, Carbonell et al. do teach

wherein the microprocessor determines whether one of a colloquialism is present in said portion of text data under consideration and said portions of translated text data, and replaces said ambiguity with standard terms representing the intended meaning (col. 10 lines 32-54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement determining whether one of a colloquialism and metaphor is present in said portion of text data under consideration of Carbonell et al. to the apparatus of

Chang, because Carbonell et al. teach that this will allow vocabulary items to reflect clear ideas and be appropriate for the target readership, col. 13 lines 55-56, col. 13 lines 54-60 and col. 10 lines 41-44.

5. Claims 13-15 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (6,185,538) in view of Parry et al. (6,077,085).

As to claim 13, which depends on claim 1, Chang does not explicitly teach setting a personal preference level for determining the level of complexity of translation.

However, Parry et al. does teach

further comprising the step of setting a personal preference level for determining the level of complexity of translation (col. 20 lines 30-55 and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement setting a personal preference level for determining the level of complexity of translation of Parry to the method of Chang because Parry et al. teach that this would maximize the student's learning efficiency using student specific activity sequencing, col. 20 lines 52-57.

As to claim 14, which depends on claim 13, Chang does not explicitly teach complexity of translation is automatically increased.

However, Parry et al. does teach wherein the level of complexity of translation is automatically increased based on a predetermined number of occurrences of similar terms (col. 12 lines 52-60 and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement complexity of translation is automatically increased of Parry to the method of Chang because Parry et al. teach that this would test and enhance comprehension of grammar, vocabulary or phrase memorization concepts, col. 11 lines 11-15.

As to claim 15, which depends on claim 13, Chang teach complexity of translation (col. 3 lines 11-12 and col. 4 lines 27-39).

Change does not explicitly teach the complexity of translation is automatically increased on a predetermined period of time.

However, Parry et al. does teach wherein the complexity of translation is automatically increased on a predetermined period of time (col. 15 lines 55-67, Fig. 8, and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the complexity of translation is automatically increased on a predetermined period of time of Parry to the method of Chang because Parry et al. teach that this would determine how well the student knows the concepts associated with a given item, col. 15 lines 55-67.

As to claim 23, which depends on claim 16, Chang teach complexity of translation (col. 3 lines 11-12 and col. 4 lines 27-39).

Chang does not explicitly teach setting a personal preference level for determining a level of difficulty.

However, Parry et al. does teach

wherein the microprocessor sets a personal preference level for determining a level of complexity of translation (col. 20 lines 30-55 and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement setting a personal preference level for determining a level of difficulty of Parry to the method of Chang because Parry et al. teach that this would maximize the student's learning efficiency using student specific activity sequencing, col. 20 lines 52-57.

As to claim 24, which depends on claim 23, Chang teach complexity of translation (col. 3 lines 11-12 and col. 4 lines 27-39).

Chang does not explicitly teach automatically increases the level of complexity of translation.

However, Parry et al. does teach

wherein the microprocessor automatically increases the level of complexity of translation based on a predetermined number of occurrences of similar terms (col. 12 lines 52-60 and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the automatically increases the level of complexity of translation of Parry to the method of Chang because Parry et al. teach that this would test and enhance comprehension of grammar, vocabulary or phrase memorization concepts, col. 11 lines 11-15.

As to claim 25, which depends on claim 23, Chang teach complexity of translation (col. 3 lines 11-12 and col. 4 lines 27-39).

Chang does not explicitly teach automatically increases the level of complexity of translation based on a predetermined period of time.

However, Parry et al. does teach

wherein the microprocessor automatically increases the level of complexity of translation based on a predetermined period of time (col. 15 lines 55-67, Fig. 8, and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement automatically increases the level of complexity of translation based on a predetermined period of time of Parry to the method of Chang because Parry et al. teach that this would determine how well the student knows the concepts associated with a given item, col. 15 lines 55-67.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

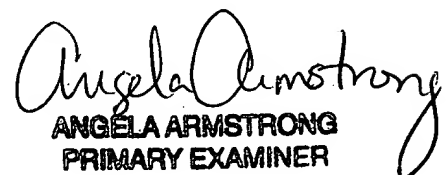
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myriam Pierre whose telephone number is 571-272-7611. The examiner can normally be reached on Monday - Friday from 5:30 a.m. - 2:00p.m.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information as to the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Myriam Pierre
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12/20/06


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